



Standard Distal Pancreatectomy vs Radical Antegrade Modular Pancreatospelenectomy: A Systematic Review and Meta-analysis of the Literature.



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INTRODUCTION

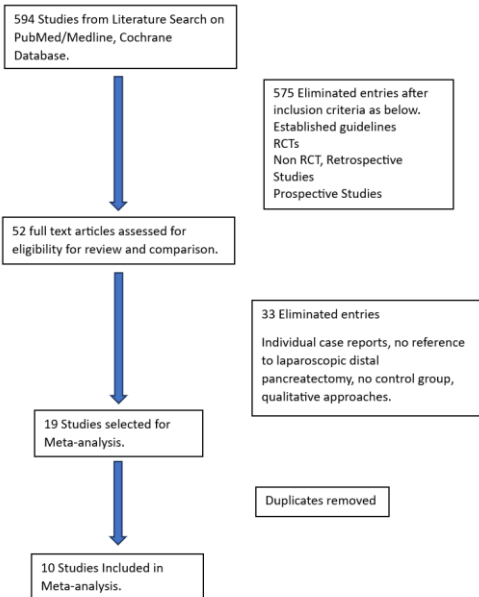
Distal pancreatectomy is a common procedure for resectable distal pancreatic tumors. In 2003, Radical Antegrade Modular Pancreatospelenectomy (RAMPS) introduced a novel approach for resection, differing from the standard distal pancreatectomy (SDP).

AIM

This meta-analysis aims to evaluate perioperative aspects and post-operative outcomes associated with RAMPS and SDP.

METHOD

A systematic literature search was conducted in PubMed, MEDLINE, EMBASE, and Google Scholar from January 1, 2003, to September 30, 2023, using the keywords 'distal pancreatectomy' and 'Radical Antegrade Modular Pancreatospelenectomy.' Eligible studies, including randomized control trials, cohort studies, and prospective studies, were selected for comparison using Review Manager 5.3. Outcomes, such as operative time, intraoperative blood loss, length of hospital stay, intraoperative blood loss, complications, residual margins and recurrence, were analyzed with 95% confidence intervals, utilizing a random-effects model.



CONCLUSIONS

Among the nine selected studies involving a total of 1662 patients, our analysis revealed no statistically significant differences in length of hospital stay, complications, achievement of R0 Resection or recurrence rates between RAMPS and SDP. However, RAMPS demonstrated reduced operative time and intraoperative blood loss. SDP demonstrated a higher number of harvested lymph nodes. Notably, two mortalities occurred in the SDP group. Further investigation and larger studies are warranted to validate these findings and provide more robust guidance for selecting the appropriate surgical approach for distal pancreatic tumors.

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RESULTS

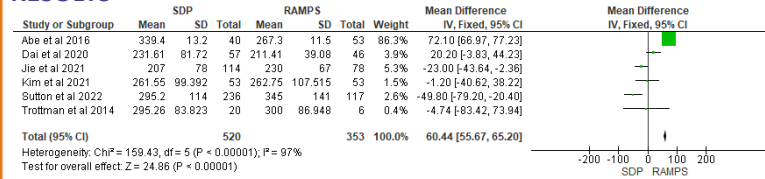


Figure 1. Operative Time

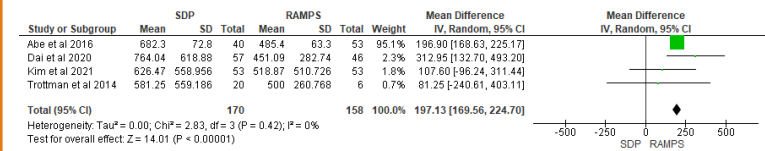


Figure 2. Intraoperative Blood Loss

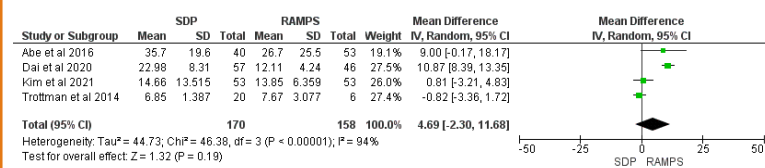


Figure 3. Length of Hospital Stay

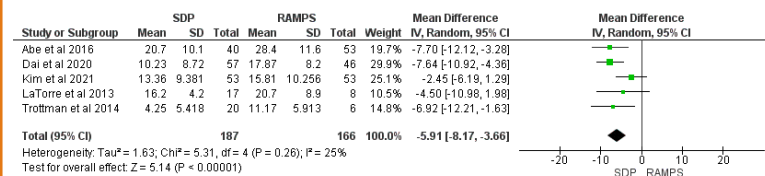


Figure 4. Number of Harvested Lymph Nodes

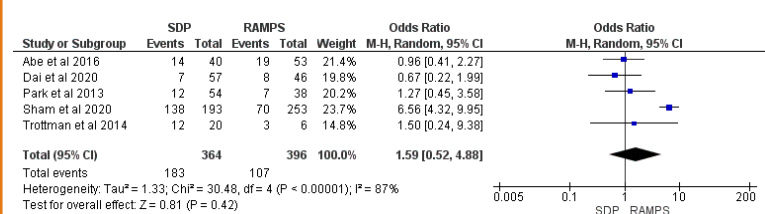


Figure 5. Complications

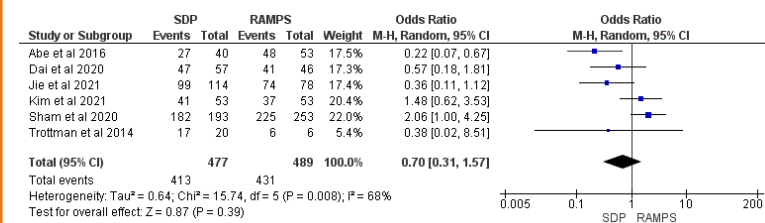


Figure 6. Clear Resection Margins (R0)

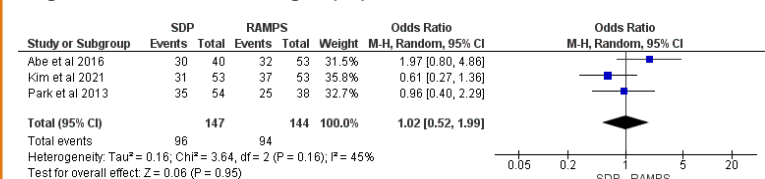


Figure 7. Recurrence